



5

10

- 1. A process for the production of deacidified fats and/or oils comprising the steps of:
- (a) reacting a technical triglyceride having an acid value of up to about 60 and an excess of a lower alcohol having from 1 to 4 carbon atoms and an effective amount of a lipase to form a pre-esterification product having an acid value of from about 0.5 to about 10,
- (b) optionally removing water and unreacted alcohol from the preesterification product,
 - (c) further reacting the pre-esterification product from step (a) or (b) with additional lower alcohol to form a post-esterification reaction product having an acid value of from about 0.1 to about 0.5.
- 15 2. The process of claim 1 wherein the technical triglyceride is a compound of the formula (I):

R³CO-O

20 R1CO-OCH2CHCH2OCOR2

(I)

wherein each of R¹CO, R²CO and R³CO is a linear and/or branched, saturated and/or unsaturated acyl group having from about 6 to about 24 carbon/atoms and having up to 3 double bonds.

25

- 3. The process of claim 1 wherein the triglyceride is a synthetic triglyceride, a natural triglyceride or a combination thereof.
- 4. The process of claim 1 wherein the triglyceride is coconut oil having an acid value of from about 15 to about 60.



- 5. The process of claim 1 wherein the acid value of the triglyceride is increased to a maximum acid value of about 60 by the addition of a fatty acid.
- 5 6. The process of claim 1 wherein the lower alcohol is methanol.
 - 7. The process of claim 1 wherein the amount of the lower alcohol is from about 1 to about 10% by weight of the triglyceride.
- 10 8. The process of claim 1 wherein the lipase is Candida antarctica.
 - 9. The process of claim 1 wherein the amount of the lipase is from about 0.5 to about 5% by weight of the triglyceride.
- 15 10. The process of claim 1 wherein steps (a) and (c) are each carried out at a temperature of from about 10 to about 50°C.